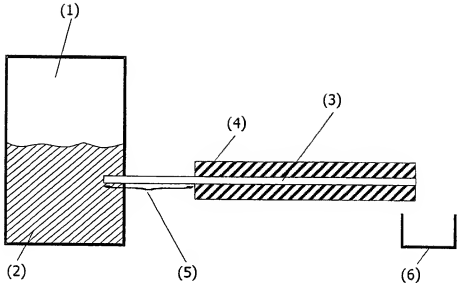

FIGURE 1

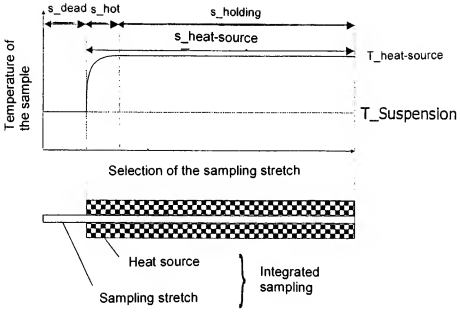
s_dead
s_hot
s_holding
s_heat-source
T_heat-source
T_Suspension
Temperature of the sample
Selection of the sampling stretch
Heat source
Sampling stretch
Integrated sampling

FIGURE 2

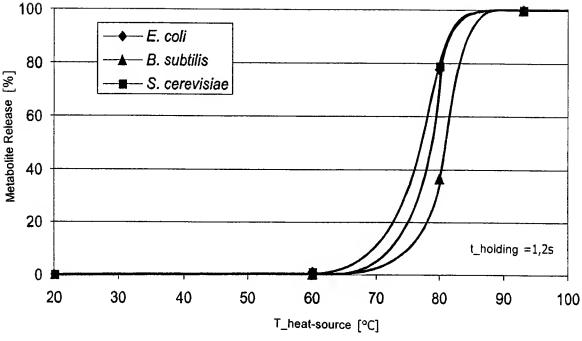
100
80
60
40
20
0
Metabolite Release [%]
E. coli
B. subtilis
S. cerevisiae
t_holding =1,2s
20
30
40
50
60
70
80
90
100
T_heat-source [°C]

FIGURE 3

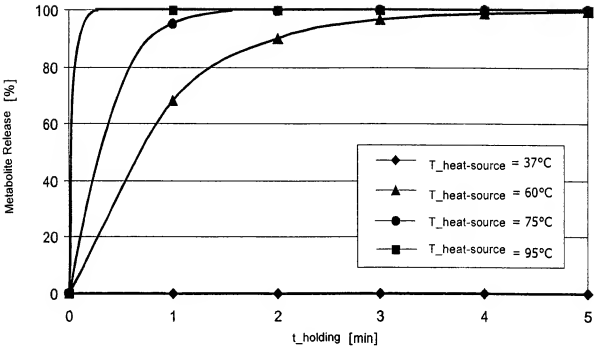
100
80
60
40
20
0
Metabolite Release [%]
0
1
2
3
4
5
t_holding [min]
T_heat-source = 37°C
T_heat-source = 60°C
T_heat-source = 75°C
T_heat-source = 95°C

FIGURE 4

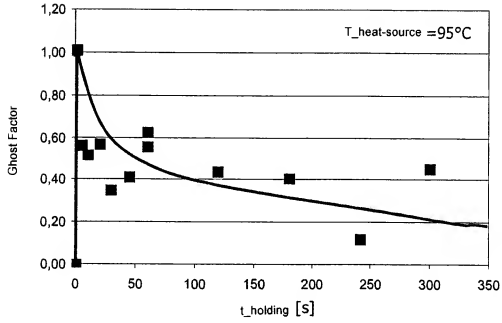
T_heat-source =95°C
Ghost Factor
1,20
1,00
0,80
0,60
0,40
0,20
0,00
0
50
100
150
200
250
300
350
t_holding [s]

FIGURE 5

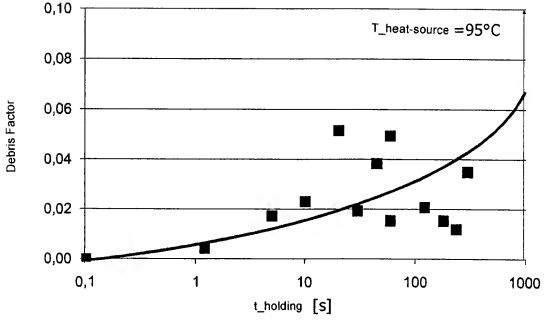
0,10
0,08
0,06
0,04
0,02
0,00
Debris Factor
T_heat-source =95°C
0,1
1
10
100
1000
t_holding [s]

FIGURE 6

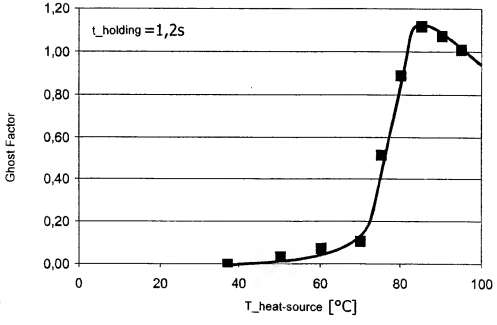
t_holding =1,2s
Ghost Factor
1,20
1,00
0,80
0,60
0,40
0,20
0,00
0
20
40
60
80
100
T_heat-source [°C]

FIGURE 7

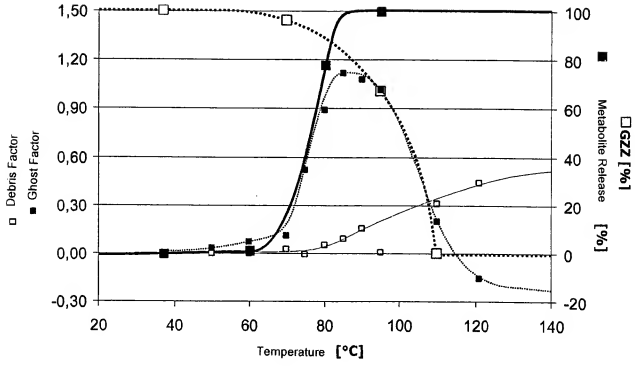
1,50
1,20
0,90
0,60
0,30
0,00
-0,30
100
80
60
40
20
0
-20
20
40
60
80
100
120
140
Temperature [°C]
Debris Factor
Ghost Factor
Metabolite Release [%]
GZZ [%]

FIGURE 8

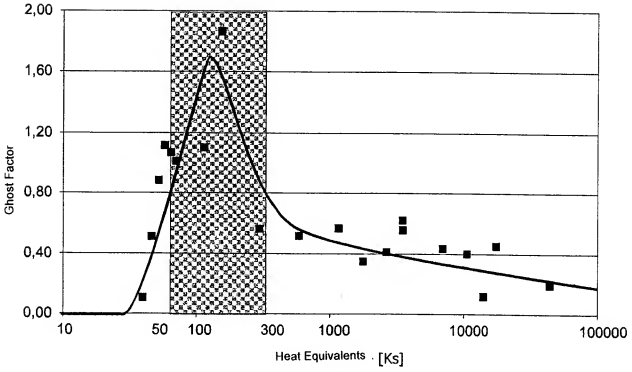
2,00
1,60
1,20
0,80
0,40
0,00
Ghost Factor
10
50
100
300
1000
10000
100000
Heat Equivalents [Ks]

FIGURE 9

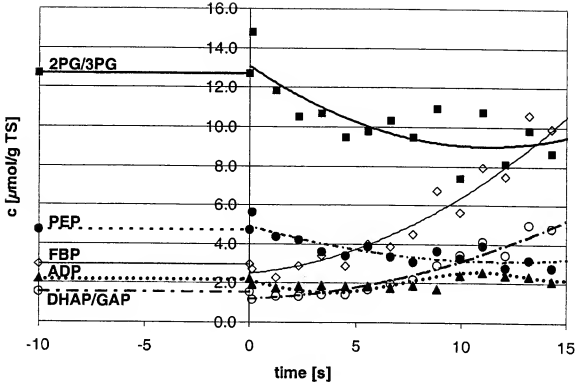
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2PG/3PG
PEP
FBP
ADP
DHAP/GAP
c [µmol/g TS]
-10
-5
0
5
10
15
time [s]

FIGURE 10